

5. And the measure *not to be adopted*, because it tends to extinguish life, is the *warm bath, without artificial respiration.*

This measure *must* be relinquished.

These conclusions are at once the conclusions of common sense and of physiological experiment. On these views human life may, nay, must, sometimes depend.—*Lancet*, April 12, 1856.

5. *On Jugular Venesection in Asphyxia, Anatomically and Experimentally Considered.*—A paper on this subject was read before the Medico-Chirurgical Society of Edinburgh (March 19th, 1856), by Dr. STRUTHERS. The object of the paper, which was illustrated by preparations and drawings of the valves in the cervical veins of the human subject, was to ascertain whether distension of the right side of the heart could be relieved by opening the external jugular vein in the human subject. The experiments of Drs. John Reid, Cormack, and Lonsdale, had satisfactorily shown that, in the lower animals (dogs, cats, and rabbits), the right side of the heart could be thus disgorged so as to restore its action, which had been arrested by a simple mechanical cause, over distension. He considered that the indication of restoring the heart's action by jugular regurgitation, had not received that attention which Dr. Reid's suggestive paper demanded for it. Dr. Struthers described the anatomy of valves which he had found in the cervical veins, as well as those usually alluded to as present in the external jugular. A pair of valves at or within the mouth of the internal jugular vein; a pair in the subclavian vein immediately external to the point of union with the external jugular; a pair at or within the mouth of the external jugular; a second pair in the course of the external jugular, at the upper end of its sinus, or large portion, about  $1\frac{1}{2}$  inch above the clavicle, and various lesser valves at the mouths or within the tributaries of the external jugular. The varieties, and relative position of the two portions of each pair of valves was described, as he had found them in numerous careful examinations. With the view of ascertaining whether regurgitation could take place notwithstanding these valves, Dr. S. performed a series of experiments on the dead subject. A pipe was fixed in the femoral vein, and tepid water thrown freely upwards. The general result was, that the external and other jugular veins very soon became distended, and that when the lancet opening was made, at about an inch above the clavicle, the fluid regurgitated freely. At first a jet came, emptying the distended sinus, and then it continued to flow, never in a jet, but in an active stream across the neck, escaping by the wound with a wriggling motion, evidently due to the obstruction offered by the valve which it had overcome. Care was taken to ascertain that the fluid came by regurgitation, not from above; but, if allowed, it also came freely from above, having ascended by the internal jugular. The introduction of a probe so as to hold aside the guardian valve of the external jugular did not much accelerate the regurgitating flow. When the catheter was introduced, however, the fluid came very freely by it—as freely as from a distended bladder. It is easy to introduce a common male catheter to the vena cava or right auricle, by directing it backwards and inwards, as well as downwards, from the point of venesection. But as soon as the catheter has entered the subclavian vein, the fluid comes as freely as when it is pushed farther. As soon as the point of the catheter is withdrawn into the external jugular, the fluid ceases to come by it. In one subject the fluid could not be made to regurgitate. This was at the time attributed to the circumstance that the cranium had been opened for the removal of the brain, the fluid pouring out by the cranial sinuses; but, on dissection, two pairs of valves were found in the external jugular below the lancet opening, besides the pair above it, as usual. Regurgitation seems to be prevented by two pairs of valves, though one pair may be overcome. In those experiments the veins of the arm did not become distended, and no regurgitation took place from a lancet-opening in the axillary vein, although afterwards it was seen that only two pair of valves had stood in the way, between the heart and the opening. By "pair," Dr. S. meant the two separate portions which act together as one valve. He (Dr. S.) drew the following conclusions: 1. No venesection can be of any use in asphyxia, except in the neck, on the principle of regurgitation; which, how-

ever, may also relieve congestion of the head. 2. That, besides warmth and friction, and (the most simple and effectual of all means) continued artificial respiration by alternate compression and relaxation of the sides of the chest, jugular venesection should be tried. 3. With reference to Dr. M. Hall's recent recommendation of the prone position, to prevent the tongue falling back and closing the glottis, the question occurred—Does the tongue fall back, under passive circumstances, in the supine position? Is not the closing of the superior glottis, under all circumstances, a muscular act—both the carrying down and back of the tongue and epiglottis, and the lifting upwards and forwards of the larynx? The mouth, however, should be cleared of frothy mucus. 4. That to obviate the evident risk of entrance of air into the veins, the wound should be closed as soon as regurgitation is about to cease, and artificial respiration be then commenced; the jugular venesection having been performed as early as possible.—*Edinburgh Medical Journal*, May, 1856.

6. *Syncope Senilis, arising from Gastric Irritation*.—Mr. JOHN HIGGINBOTTOM has given the name of syncope senilis to an affection common, he says, to all ages, but which occurs in a more aggravated form in infancy and old age. The symptom of syncope is not very apparent in the former period of life, but is so in old age, and is the first symptom requiring prompt attention, for if remedies are neglected, convulsions and death follow.

"It is," Mr. H. observes, "about thirty years since I first noticed particularly the syncope senilis. The subject was about seventy years of age. I thought at that time it was a precursor of an attack of apoplexy, the patient having had a slight paralysis when about twenty-three years of age, which affected him slightly through life. I was glad to find, on his recovery, that there was no increase of his paralytic symptoms. Since that time, I have often observed the same syncope, unattended by any permanent ill effects.

"My patients have been from sixty-eight to eighty-six years of age; the youngest sixty-eight, the oldest eighty-six. I am not aware that they have laboured under any organic disease whatever; but we all know, that at an advanced age the brain and heart, the nervous and vascular system, are frequently more inactive, and in an impaired condition.

"In the cases I have attended of syncope senilis, gastric irritation appears to have been the sole cause of the attack. At that advanced age, mastication of the food is very imperfectly or not at all performed, for want of teeth; solid animal food has been eaten when the stomach has been in an unfit state to assimilate it, usually after having had a longer walk than the patient has been accustomed to, or had more muscular exertion than usual, so as to produce fatigue, and sometimes after exposure to cold; all which tend to weaken the power of the stomach. On this account the food remains an indigestible mass in the stomach, and gives rise to gastric irritation, producing syncope and convulsion, which sometimes follows, often slight at first, but becoming more formidable, or even fatal, if proper remedies are not promptly used.

"I was called to a patient about three o'clock in the morning, his wife having been awoken by his hard breathing and noise in his throat. She found her husband was in a fit. I was directly sent for. When I arrived he had partially recovered, but very soon after he had a second fit, which had the appearance of a slight attack of epilepsy, attended with convulsion, but had no bitten tongue, as is usual in severe attacks of epilepsy. As soon as he was sufficiently recovered from the attack, so that he could swallow, I gave him half a drachm of the powder of ipecacuanha with fifteen grains of the bicarbonate of potass, which was followed by full vomiting; he ejected lumps of solid beef, which appeared to have been swallowed, or rather bolted, without having been masticated at all; one of the pieces, I observed, was about an inch long and three quarters of an inch in thickness. Although the food had been taken into the stomach about sixteen hours, the acute corners and edges of the beef appeared as if just cut with a sharp knife, not the least digested. No further remedy was required after the emetic, but attention to the bowels, which he reluctantly submitted to, saying he was quite well.

"In a month afterwards he had another fit of a similar nature. He fell down